This listing of claims replaces all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (currently amended) A method of preventing saturation of an analog to digital converter circuit by an input signal that contains both a baseband signal component and a blocker signal component comprising:

oversampling said input signal;

separating said blocker signal component from said input signal;

detecting the amplitude of said blocker signal component;

separating said baseband signal component from said input signal;

adjusting the amplitude of ~~said~~ a baseband signal component based upon said amplitude of said blocker signal component prior to application of said baseband signal component to a modem that controls the gain of said wireless receiver circuit so that said gain maintains said input signal in a range that prevents saturation of said wireless receiver circuit.

2. (original) The method of claim 1 further comprising:

attenuating said input signal prior to application to an A/D circuit in said wireless receiver circuit whenever said blocker signal component is detected in said input signal to ensure that said A/D circuit is not saturated.

3. (currently amended) A method of actively filtering an input signal of an analog to digital converter circuit that may contain both a baseband signal component and a blocker signal component comprising:

detecting the presence of said blocker signal component in said input signal;

generating a control signal upon detection of said blocker signal component;

applying an active filter to said input signal in response to said control signal so that ~~said~~ power consumption of ~~said~~ a receiver circuit is minimized, said active filter being integrated into said receiver circuit.

4. (original) The method of claim 3 wherein said step of applying an active filter to said input signal comprises:

applying a multistage active filter to said input signal in response to said control signal such that the number of filtering stages of said multistage filter that are used to filter said input signal varies in accordance with the amplitude of said control signal.

5. (original) The method of claim 3 wherein step of applying said active filter to said input signal comprises applying said active filter to said input signal upstream from a variable gain amplifier in said receiver circuit.

6. (original) The method of claim 3 wherein step of applying an active filter to said input signal comprises applying said active filter to said input signal downstream from a variable gain amplifier in said receiver circuit.

7. (original) A method of adjusting the dynamic range of a sampling circuit in a wireless receiver circuit to increase detection of a baseband signal component in an input signal that contains a baseband signal component and a blocker signal component comprising:

separating said blocker signal component from said input signal;

detecting the presence of said blocker signal component in said input signal;

adjusting the sampling rate of said sampling circuit based upon the presence of said blocker signal component in said input signal such that said dynamic range of said sampling circuit increases whenever said blocker signal component is present.

8. (original) The method of claim 7 wherein said step of detecting the presence of said blocker signal component further comprises:

detecting the amplitude of said blocker signal component.

9. (original) The method of claim 8 further comprising:

separating said baseband signal component from said input signal;

adjusting the amplitude of said baseband signal component based upon said amplitude of said blocker signal component prior to application of said baseband signal component to a modem that controls the gain of said wireless receiver circuit so that said gain maintains said input signal in a range that prevents saturation of said wireless receiver circuit.

10. (original) The method of claim 8 wherein said step of adjusting said sampling rate of said sampling circuit further comprises:

adjusting the said sampling rate of said sampling circuit in accordance with said amplitude of said blocker signal.

11. (original) A method of adjusting the dynamic range of a sampling circuit in a wireless receiver circuit to increase detection of a baseband signal in an input signal that may contain a baseband signal and blocker signal comprising:

separating said blocker signal component from said input signal;

detecting the presence of said blocker signal component in said input signal;

adjusting the order of operation of said sampling circuit based upon the presence of said blocker signal component in said input signal such that said dynamic range of said sampling circuit increases whenever said blocker signal is present.

12. (original) The method of claim 11 wherein said step of detecting the presence of said blocker signal component further comprises:

detecting the amplitude of said blocker signal component.

13. (original) The method of claim 11 further comprising:

separating said baseband signal component from said input signal;

adjusting the amplitude of said baseband signal component based upon said amplitude of said blocker signal component prior to application of said baseband signal to a modem that controls the gain of said wireless receiver circuit so that said gain maintains said input signal in a range that prevents saturation of said wireless receiver circuit.

14. (original) The method of claim 11 wherein said step of adjusting said order of operation of said sampling circuit further comprises:

adjusting said order of operation of said sampling circuit in accordance with said amplitude of said blocker signal.

15. (original) A wireless receiver circuit that automatically adjusts the gain of an input signal that contains both a baseband signal component and a blocker signal component to prevent saturation of receiver circuit comprising:

a modem having a modem input that receives said baseband signal component and generates a gain control signal that varies in accordance with the amplitude of said baseband signal;

a variable gain control amplifier that controls the gain of said input signal in accordance with the amplitude of said gain control signal;

a blocker signal detector that determines the amplitude of said blocker signal component of said input signal and generates a digital level shifter control signal;

a digital level shifter that shifts said amplitude of said baseband signal in accordance with said digital level shifter control signal so that said amplitude of said baseband signal that is applied to said modem is within a predetermined input range of said modem.

16. (original) The wireless receiver circuit of claim 15 further comprising:

an attenuator that is connected to an output of said variable gain amplifier whenever said blocker signal detector determines that said amplitude of said blocker signal component exceeds a predetermined threshold.

17. (currently amended) In an analog to digital converter circuit, a method of ensuring detection of a baseband signal in an input signal that contains both a baseband signal component and a blocker signal component comprising:

oversampling said input signal;

separating said blocker signal component from said input signal;

detecting the amplitude of said blocker signal component;

separating said baseband signal component from said input signal;

adjusting the amplitude of said baseband signal component to ensure proper detection of said baseband signal component while maintaining gain of said input signal in a range that prevents saturation of ~~said~~ a wireless receiver circuit.

18. (original) In an analog to digital converter circuit, a method of ensuring detection of both a baseband signal and a blocker signal in an input signal that contains both a baseband signal component and a blocker signal component comprising:

oversampling said input signal;

separating said blocker signal component from the oversampled input signal prior to decimation;

detecting the amplitude of said blocker signal component;

separating said baseband signal component from said input signal.